DESKLINE®
IMPROVING ERGONOMICS

Controls/Handsets

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WE IMPROVE YOUR LIFE

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Preface

Dear User,

We are delighted that you have chosen a product from LINAK®.
LINAK systems are high-tech products based on many years of experience in the manufacture and development of actuators, electric control boxes, controls and chargers.

This User Manual does not address the end-user. It is intended as a source of information for the manufacturer of the equipment or system only, and it will tell you how to install, use and maintain your LINAK electronics. It is the responsibility of the manufacturer of the end-use product to provide a User Manual where relevant safety information from this manual is passed on to the end-user.

We are sure that your LINAK product/system will give you many years of problem-free operation.
Before our products leave the factory they undergo full function and quality testing. Should you nevertheless experience problems with your LINAK product/system, you are always welcome to contact your local dealer.

LINAK subsidiaries and some distributors situated all over the world have authorised service centres, which are always ready to help you.
LINAK provides a warranty on all its products. This warranty, however, is subject to correct use in accordance with the specifications, maintenance being done correctly and any repairs being carried out at a service centre, which is authorised to repair LINAK products.
Changes in installation and use of LINAK products/systems can affect their operation and durability. The products are not to be opened by unauthorised personnel.

The User Manual has been written based on our present technical knowledge. We are constantly working on updating the information and we therefore reserve the right to carry out technical modifications.

LINAK A/S

Important information

Important information on LINAK® products can be found under the following headings:

Warning!
Failure to comply with these instructions may result in accidents involving serious personal injury.

Failing to follow these instructions can result in the product being damaged or being destroyed.

Safety instruction

General

Safe use of the system is possible only when the operating instructions are read completely and the instructions contained are strictly observed.

Failure to comply with instructions marked with the "NOTE" symbol may result in serious damage to the system or one of its components.

It is important for everyone who is to connect, install, or use the systems to have the necessary information and access to this User Manual. Follow the instructions for mounting – risk of injury if these instructions are not followed.

The appliance is not intended for use by young children or infirm persons without supervision.

If there is visible damage on the product it must not be installed.

Note that during construction of applications, in which the actuator is to be fitted, there must be no possibility of personal injury, for example the squeezing of fingers or arms.

Assure free space for movement of application in both directions to avoid blockade.

Only for EU markets

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.

Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

Only for Non EU markets

Persons who do not have the necessary experience or knowledge of the product/products must not use the product/products. Besides, persons with reduced physical, sensory or mental abilities must not use the product/products, unless they are under surveillance or they have been thoroughly instructed in the use of the apparatus by a person who is responsible for the safety of these persons.

Moreover, children must be under surveillance to ensure that they do not play with the product.

Misuse

Do not overload the actuators – this can cause danger of personal injury and damage to the system.

Do not use the actuator system for lifting persons. Do not sit or stand on a table while operating – risk of personal injury.

Do not use the system in environments other than the intended indoor use

Repairs

In order to avoid the risk of malfunction, all DESKLINE® repairs must only be carried out by authorised LINAK® workshops or repairers, as special tools must be used and special gaskets must be fitted. Lifting units under warranty must also be returned to authorised LINAK workshops.

Warning!
If any of the DESKLINE® products are opened, there will be a risk of subsequent malfunction.

Warning!
The DESKLINE® systems are not resistant to cutting oil.

DECLARATION OF INCORPORATION OF PARTLY COMPLETED MACHINERY

LINAK A/S
Smedevænget 8
DK - 6430 Nordborg

Name and address of the person authorized to compile the relevant technical documentation:
John Kling, Group Headquarters, Guderup, DK-6430 Nordborg, email jkl@linak.com

Herewith declares that LINAK Actuators and Actuator Systems comply with the following parts of the Machinery Directive 2006/42/EC, ANNEX I, *Essential health and safety requirements relating to the design and construction of machinery*:
1.5.1 Electricity supply: *Directive 2006/95/EC on the harmonization of the laws of Member States relating to electrical equipment designed for use within certain voltage limits.*
1.5.10 Radiation, 1.5.11 External radiation: *Directive 2004/108/EC on the approximation of the laws of the Member States relating to electromagnetic compatibility.*

The relevant technical documentation is compiled in accordance with part B of Annex VII and that this documentation or part hereof will be transmitted by post or electronically to a reasoned request by the national authorities.

This partly completed machinery must not be put into service until the final machinery into which it is to be incorporated has been declared in conformity with the provisions of this Directive, where appropriate.

Date: 2010-01-01

Signature:

John Kling
Certification and Regulatory Affairs

Misc. on the DESKLINE® system

Warranty - 60 months on DESKLINE® (NEW)
This will be valid for all DESKLINE® products produced after the 1st of May 2015.

Products produced before 1st of May 2015 will still be covered by 36 months.

Products used in DESKLINE application: If these products are used in another application, they will be covered by 18 months warranty.

If there is any doubt that returned products are within the warranty period it is to be treated as if they are covered by the warranty. We recommend that you use the date of the Control box or actuator as reference if possible. We will have our purchase no. printed on the label.

Maintenance
Clean dust and dirt on the outside of the system at appropriate intervals and inspect for damage and breaks. Inspect the connections, cables, and plugs and check for correct functioning as well as fixing points.

The cleaners and disinfectants must not be highly alkaline or acidic (pH value 6-8).

ETL-marking

Due to space limitations, the complete ETL-marking demands are not represented on the marking plates.

The full ETL Recognized Component markings are shown here.

C/N 120690
Conforms to ANSI/AAMI Std. ES60601-1
Cert. to CSA Std. C22.2 No. 60601-1
ETL Recognized Component mark for Canada and United States

C/N 4008003
Conforms to ANSI/AAMI Std. ES60601-1
Cert. to CSA Std. C22.2 No. 60601-1
ETL Recognized Component mark for Canada and United States

C/N 4008004
Conforms to ANSI/AAMI Std. ES60601-1
Cert. to CSA Std. C22.2 No. 60601-1
ETL Recognized Component mark for Canada and United States

C/N 4008005
Conforms to ANSI/AAMI Std. ES60601-1
Cert. to CSA Std. C22.2 No. 60601-1
ETL Recognized Component mark for Canada and United States

C/N 4008623
Conforms to ANSI/AAMI Std. ES60601-1
Cert. to CSA Std. C22.2 No. 60601-1
ETL Recognized Component mark for Canada and United States

C/N 4008671

Conforms to UL962
Cert. to CSA Std. C22.2 No. 68-09
ETL Recognized Component mark for Canada and United States

C/N 4008838

Conforms to ANSI/AAMI Std. ES60601-1
Cert. to CSA Std. C22.2 No. 60601-1
ETL Recognized Component mark for Canada and United States

C/N 4009507

Conforms to UL962
Cert. to CSA Std. C22.2 No. 68-09
ETL Recognized Component mark for Canada and United States

C/N 9901916

Conforms to ANSI/AAMI Std. ES60601-1
Cert. to CSA Std. C22.2 No. 60601-1
ETL Recognized Component mark for Canada and United States

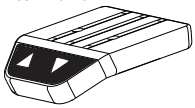
Overview of the DESKLINE Controls product range

The desk panel is used to operate the DESKLINE system. The desk panel product range consists of number of desk panels with different functions:

For single/parallel drive without memory: DPA, DPB, DP1K, DP1V, DPF1K, DPH and DPF1D

DPA - Desk Panel

DPB - Desk Panel



DP1K - Desk Panel

DP1V - Desk Panel

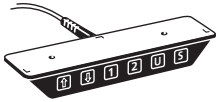
DPF1K - Desk Panel

DPH - Desk Panel

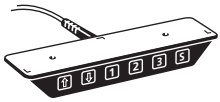
DPF1D - Desk Panel

For single/parallel drive with memory: DP1N, DP1U, DP1CS, DPF1C, DPF1M and DPT

DP1N - Desk Panel

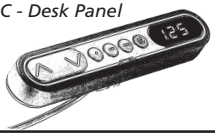


DP1U - Desk Panel



DP1CS - Desk Panel

DPF1C - Desk Panel

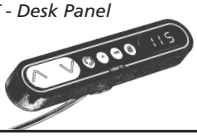


DPF1M - Desk Panel

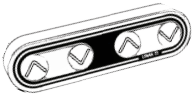
DPT

For drive of more references: DPF4T, DPF2K and DPF3K

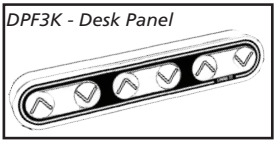
DPF4T - Desk Panel



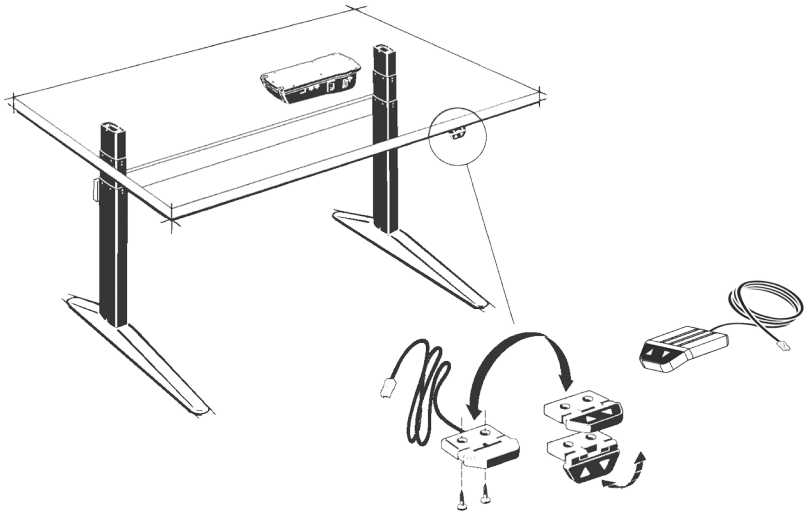
DPF2K - Desk Panel



DPF3K - Desk Panel



Mounting guidelines for DPA/DPB



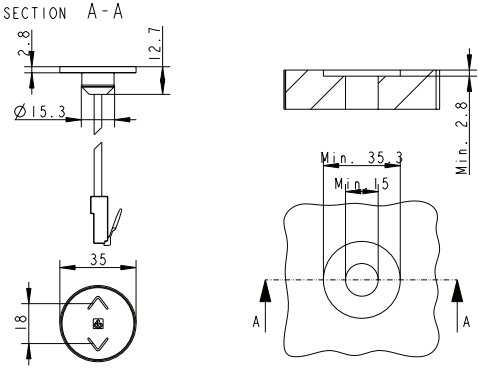
The DPA/DPB can be mounted on the desktop so that the keys are either facing upwards or outwards. Alternatively the DPA can be mounted flat under the desktop with the keys facing downwards.

Operation of the DPA/DPB in connection with DESKLINE® systems (not CBD2N)
The Desk Panel is used to operate the DESKLINE system. The two arrow buttons are used for parallel drive.

Parallel drive (ΔΔ)
The arrow buttons start parallel drive. The function is only activated when holding the button down.

The mounting screws on the DP, DPA, or DPB must be fastened with a max. torque of 1 Nm.

Mounting guidelines for DPH



The hole in the tabletop must be in accordance with this drawing.

Operation of the simple desk panels

Here you find the guide on how to operate the DPA, DPB, DP1K, DP1N, DP1U, DP1V, DPH and DP1CS

- ⇧ Desk up
- ⇩ Desk down
- S Store memory
- U User memory
- 1 Memory 1
- 2 Memory 2
- 3 Memory 3

Single/parallel drive ⇧ ⇩
The arrow buttons start the DESKLINE lifting column. The function is only activated when holding down the button.

Store memory S
- Push S
- Within two sec. push either 1 , 2 or 3

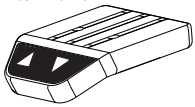
Choice of user U (only DP1N)
Two persons can store 2 memory positions each.
Select user 1 or user 2.
- Push U
- Within two sec. push either 1 or 2

Store memory S
- Push S
- Within two sec. push either 1 or 2

Memory drive 1 2 3
Memory 1, 2, and 3 start a memory drive, the channel(s) drive to a preprogrammed position.

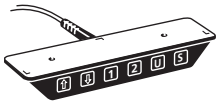
DPA - Desk Panel

DPB - Desk Panel

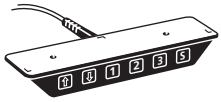


DP1K - Desk Panel

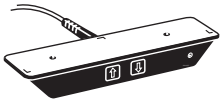
DP1N - Desk Panel



DP1U - Desk Panel



DP1V - Desk Panel



DPH - Desk Panel

DP1CS - Desk Panel

Operation of the DP1C

The DP1C cannot be used on the CBD4 with mains cut-off.

Description

The DP1C is equipped with display and memory and is compatible with CBD4 (Advanced, software 077402 ver. 1.66 or later). The DP1 is only available as a 1-channel version for operation of the parallel channels up and down. The actual height of the desk is shown in the display. The display is of the LED type with a yellow light and 10 mm high digits.

- ⇧ Desk up
- ⇩ Desk down
- S Store memory
- 1 Memory 1
- 2 Memory 2
- 3 Memory 3

Normal operation:

To run the desk up or down, press the UP or DOWN button, and keep it pressed until the desk reaches the desired height. The display will count up or down while running, and after stop it will continually show the current height of the desk.

Changing between cm and inches:

Keep the S button pressed for approx. 4 sec. and the reading will change from the current setting.
The default setting depends on the type chosen.

Store a memory position:

When pressing the "store" button, the display will flash "S" for 3 sec. Within the 3 sec. press memory button 1, 2 or 3. The display will acknowledge by showing S1, S2 or S3 for 1 sec. To abort a store sequence, press the UP or DOWN button while the "S" is flashing, or wait the 3 sec. until the display automatically returns to show the height of the desk.

Drive to a stored position:
Version with "GO-memory"

Press memory button 1, 2, or 3. The display will flash "GO1", "GO2" or "GO3" for 3 sec. Within the 3 sec. press the UP or DOWN button and keep it pressed until the desk stops in the stored position. Both the Up and the Down button will activate memory drive. Although e.g. the memory position is higher than the actual height, it will drive upwards when you press the Down button. While running to a memory position the display will show GO1, GO2 or GO3, and when it stops in the stored position, the height of the desk will be shown. Releasing the UP or DOWN button will abort the memory drive. The display will show the height of the desk.

Version with "standard memory"

Press memory button 1, 2, or 3 and the system will start driving to the wanted memory position. Keep the button pressed until the position is reached. The display will show the actual height during the memory run.

Adjust the display to show the correct height:

It may be necessary to adjust the display due to different thicknesses of desktops etc, when the DP is delivered from the factory. The DP will show 68 cm or 24.5 inches (default setting) height of the desk. At the same time press the "Store" button and step UP or DOWN, until the display shows the correct height.

Adjusting the light intensity of the LED display

Possible light settings are: 0 = off, 25 = 25%, 50 = 50%, 75 = 75%, 100 = 100%.
Adjustment procedure
Press the "1" button and at the same time either "desk up" or "desk down" this will adjust the light intensity. Initial press will show the current setting. Keep the "1" button pressed during the whole sequence while adjusting up or down. Keep a button pressed for more than 800 msec then the button will auto repeat every 100 msec. Releasing all buttons stores the new setting.

Adjusting the light timeout
Possible light timeouts are: 0-15 sec and off
Adjustment procedure
Press the "3" button and at the same time either "desk up" or "desk down" - this will adjust the light timeout. Initial press will show the current setting. Keep the "3" button pressed during the whole sequence while adjusting up or down. Keep a button pressed for more than 800 msec, then the button will auto repeat every 100 msec. Releasing all buttons stores the new setting.

Errors
Below please find the possible errors that can be displayed. The errors will only be displayed when a button is pressed. The display blinks while showing the error. E16 overrules any other error as the detection is registered only in the display and no message is sent to the control box.

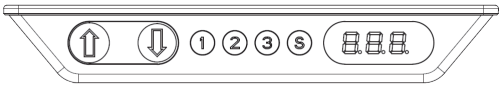
Diagnostic errors
The CBD4 (version 1.86 or later) can send up to 6 different diagnostic error codes at the same time.
The diagnostic error codes will overrule error states (except E16). Diagnostic errors will only appear as long as the button is pressed. The display will blink EXX and will toggle through the diagnostic errors and send them to the LINBUS in the CBD. For detailed error description and codes, please see the appropriate CBD software description.
(Only working with DP1C from production date 1 february 2006 and onwards)

Error no.	Description
E01	The desk has an unknown position and needs to be initialised.
E02	Overload upwards has occurred.
E03	Overload downwards has occurred.
E16	Illegal keys pressed.

Operation of the DP1CS

Description
The DP1CS is equipped with display and memory and is compatible with DESKLINE control boxes. The DP1CS is available as a 1-channel version for operation of the parallel channels up and down. The actual height of the desk is shown in the display. The display is of the LED type with a yellow light and 10 mm high digits.

- ⇧ Parallel up
- ⇩ Parallel down
- 1 Memory 1
- 2 Memory 2
- 3 Memory 3
- S Store memory



Up and down (∧V):
You just either have to activate the up or down button for parallel drive and the system will drive until releasing the button again or when the system reaches end position.

Memory:
The four small buttons are used for memory drive/storing memory.

Store memory
- Press S – button, the display will flash "S" for 2 seconds
- Within these two seconds press one of the small buttons with numbers "1", "2" or "3" and the position will be stored at this button.
- The panel will acknowledge by showing "1", "2" or "3" in the display depending on the chosen position

Memory drive
Press one of the memory buttons and the system will start driving to the pre-programmed memory position. Keep the button pressed until the position is reached.

Display function
Shows the actual height in either cm or inch and can display error codes.

Other functions:

Adjusting initial height:
It may be necessary to adjust the displayed height due to different thicknesses of desktops etc. The DP1CS will as standard show either 68cm or 24.5 inch as the default desk height.

Procedure:
Press Λ and V keys at the same time and keep them pressed for 5 seconds. This allows the initial height to be adjusted. Until the initial height can be adjusted, the display will show three minuses (---) - hereafter the display will revert to showing the height. The height can then be adjusted by either Λ or V until the desired height has been reached. The system will return to normal operation (and give a short blink) after 5 seconds of inactivity on the keys.

The feature can be disabled via configuration in which case pressing the Λ and V keys at the same time will be considered an illegal keypress.

Switch between cm and inch:
Switching between cm and inch can only be done via the DPF configurator

Adjusting the light intensity of the LED display:
Possible settings are Off, 6%, 12%, 19%, 25%, 37%, 50%, 75% and 100%.

The adjustment can only be done via the DPF configurator.

Adjusting the light timeout:
Possible settings are 0-15 seconds and Off.

The adjustment can only be done via the DPF configurator.

Error codes
Below please find the possible error codes that can be displayed. The error codes will only be displayed when a button is pressed. The display will blink while showing the error code. The E16 error will overrule any other errors as the detection is registered only in the display and no message is send to the control box.

Error no.	Description
E01	The desk has an unknown position and needs to be initialised.
E02	Overload in upward direction has occurred.
E03	Overload in downward direction has occurred
E16	Illegal keys are pressed.

Remote control HB10RF / HB20IR

Operation of the system:
The HB21 IR transmitter is a simple up/down control with a button for the up activation and a button for the down activation of 1 reference on the CBD.

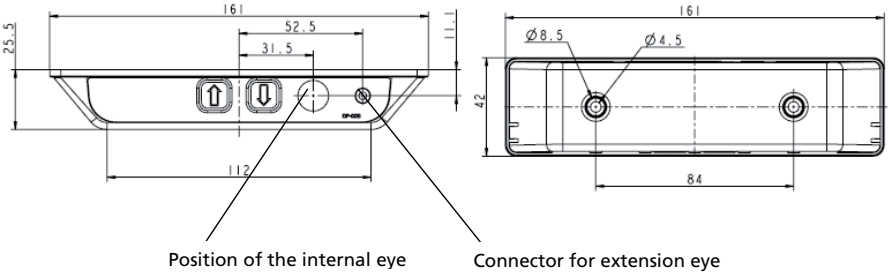
The HB22 is a two-channel controller, for controlling two references on the CBD.

For activation of the control box point with the HB20 at the DP1V or the extension eye: Press the button up or down.

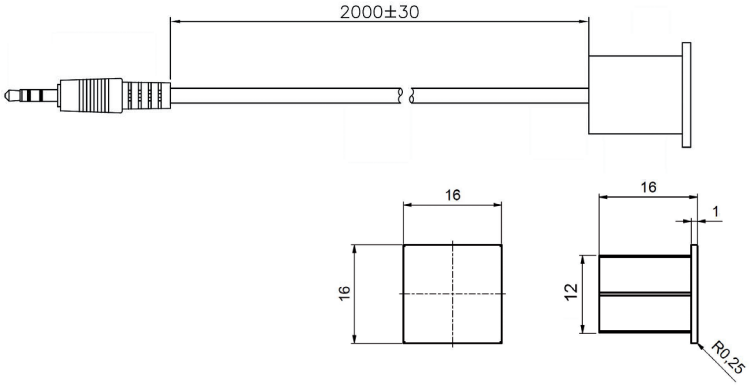
The operation range for the HB20 is approx. 6 m.

Drawings:

DP1V

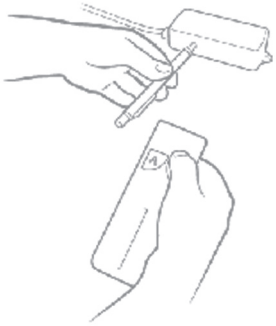


IR extension eye article number 0964571



The IR extension eye is for mounting in a 12 mm hole. The eye has a 2000 mm cable with a mini Jack plug, which is to be plugged into the DP1V.

Activating the learning mode:
Activate the reset key on the RFR by using a pen or similar to keep the button pressed.



- Keeping the reset key activated; the RF handset must be activated by pressing a random key on the RF handset. The RF handset IDs are stored in the memory and at the same time, previous RF handset IDs are erased.
- After having activated the RF handset keys the reset key must be released.
- If no RF handset keys are activated during the matching procedure; no changes are made in the ID memory.
- Please be aware that other equipments (as e.g. doorbells), which use the 433 MHz can disturb the RF signal.

Every RF handset has its own 32 bit unique address and the RF protocol contains a check sum which ensures that only the handset that has been activated during the learning process can activate the system. No noise signal from other RF equipment can activate the system, but might prevent it from running depending on the signal strength of the noise signal.

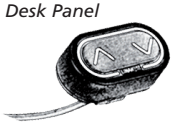
The operation range for the HB10 is approx. 6 m, but depending on the surroundings where it is mounted it can be less. E.g. if the receiver is mounted in a cabinet along with other equipment.

The RF uses the frequency 433 MHz

Operation of the DPF

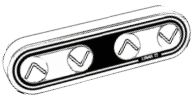
K-version:
Just activate either the up or down button for parallel drive and the system will drive until the button is released again or the system reaches end position.

DPF1K - Desk Panel



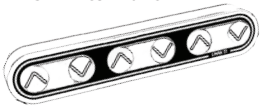
2K-version:
Just activate either the up or down button and the system will drive until the button is released again or the system reaches end position. Each set of up/down buttons refers to a reference. You can only drive one reference at a time. The desk panel can have up to 2 references.

DPF2K - Desk Panel



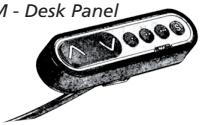
3K-version:
Just activate either the up or down button and the system will drive until the button is released again or the system reaches end position. Each set of up/down buttons refers to a reference. You can only drive one reference at a time. The desk panel can have up to 3 references.

DPF3K - Desk Panel



M-version:
The DPF is divided into parallel and memory drive. The two arrow buttons are used for parallel drive and the last four buttons for memory drive/storing memory.

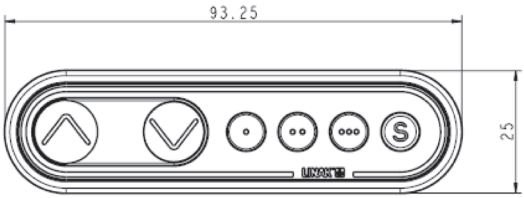
DPF1M - Desk Panel



Λ = Parallel up
V = Parallel down

S = Store memory

• = Memory 1
•• = Memory 2
••• = Memory 3

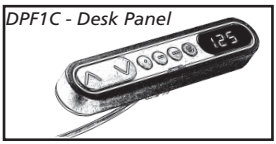


Parallel drive (ΛV)
The arrow buttons start parallel drive. The function is only activated when holding the button down.

Store memory
- Press S – button
- Within two seconds press one of the small buttons with dots and the position will be stored at this button.

Memory drive (small buttons with dots)
Press one of the memory buttons and the system will start driving to the pre-programed memory position. Keep the button pressed until the position is reached.

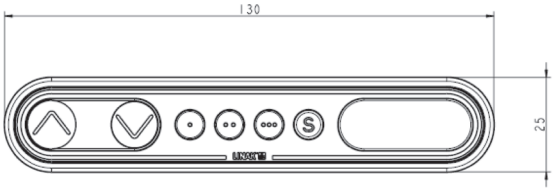
Operation of the DPF1C “one reference”



Λ = Parallel up
V = Parallel down

S = Store memory

• = Memory 1
•• = Memory 2
••• = Memory 3



Up and down (Λ V):
Just activate either the up or down button for parallel drive and the system will drive until the button is released again or the system reaches end position.

Memory:
The four small buttons are used for memory drive/storing memory.

Store memory
- Press S – button, the display will flash for 2 seconds
- Within these two seconds press one of the small buttons with dots and the position will be stored at this button.
- The panel will acknowledge by showing “1”, “2” or “3” in the display depending on chosen position

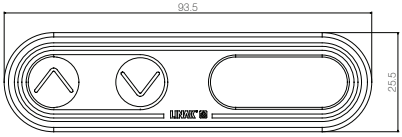
Memory drive (small buttons with dots)
Press one of the memory buttons and the system will start driving to the pre-programmed memory position. Keep the button pressed until the position is reached.

Display function
Shows the actual height in either cm or inch.

Operation of the DPF1D (Display and up/down drive)

DPF1D - Desk Panel

Λ = Parallel up
V = Parallel down

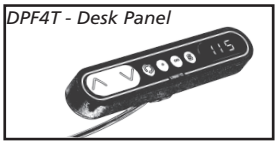


Function:
Compared to a standard DPF1C the DPF1D has no memory positions. The panel is a simple one that will show the height when adjusting and error codes when needed.

Up and down (^V):
You just either have to activate the up or down button for parallel drive and the system will drive until releasing the button again or when the system reaches end position.

Display function:
Shows the actual height in either cm or inch and can display error codes

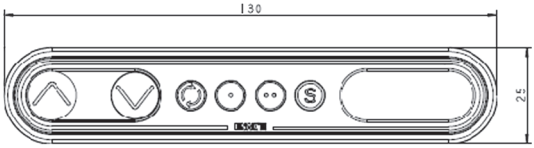
Operation of the DPF4T “multiple references”



Λ = Parallel up
V = Parallel down

S = Store memory

= Toggle button
•• = Memory 1
•• = Memory 2



Function:
Compared to a standard DPF1C the first memory button on the DPF4T is replaced by a toggle button, i.e. that the panel has 2 memory buttons instead of 3 (memory 1 and memory 2).Besides the toggle button the DPF4T works like the DPF1C.

Up and down (ΛV):
You just either have to activate the up or down button for parallel drive and the system will drive until releasing the button again or when the system reaches end position.

Memory:
The four small buttons are used for toggle function, memory drive and storing memory.

Store memory
- Press S – button, the display will flash for 2 seconds
- Within these two seconds press one of the small buttons with dots and the position will be stored at this button 1A.
- The panel will acknowledge by showing “1”or “2” in the display depending on the chosen position

Memory drive (small buttons with dots)
Press one of the memory buttons and the system will start driving to the pre-programmed memory position. Keep the button pressed until the position is reached.

Display function
Shows the actual height in either cm or inch.

Toggle function (Operation):
Press the "*Toggle*" button to toggle through all reference choices and make a selection to which reference you would like to use. For example, the display may show 123 – press one more time and 234 is shown*. Since 3 is the bolded number, you have now selected reference 3 and the up down buttons are running reference 3 up-down.

When activating the up down button it first displays the reference number shortly for ½ sec then the actual height.

Reference setup is set in the CBD4 using the configuration software.

The DPF will automatically find out how the system is configured; One, two, three or four references.

* If only two references exist 121 // 212 is shown in the display.

Important notes:
All actuator ports must be used.

If you create a 2 reference system (2 parallel + singles) and only use three ports on a 4-channel control box, the desk panel will show "*123*". You will be able to select reference three even through it is not connected.

The multi controller must not be used in combination with CBD4 software with the impulse drive feature. There is a risk that the used software initiate impulse movement, toggle to the next reference and therefore cannot stop the movement until it is back at the reference with impulse.

Memory positions:
1A The memory position will be for all references. When using memory one or two, reference one will first drive to its memory position followed by reference two and so on.

Other functions common for DPF1C and DPF4T

Adjusting initial height
It may be necessary to adjust the displayed height due to different thicknesses of desktops etc. The DPF1C will as standard either show 68 cm or 24.5 inch as the default desk height.

Procedure:
Press Λ and V keys at the same time and keep them pressed for 5 seconds. This allows the initial height to be adjusted. Until the initial height can be adjusted, the display will show three minuses (---) hereafter the display will revert to showing the height. The height can then be adjusted by either Λ or V until til desired height has been reached. The system will return to normal operation (and give a short blink) after 5 seconds of inactivity on the keys.

The feature can be disabled via configuration in which case pressing the Λ and V keys at the same time will be considered an illegal keypress.

Switch between cm and inch.
Switching between cm and inch can only be done via the DPF1C configurator.

Adjusting the light intensity of the LED display
Possible settings are Off, 6%, 12%, 19%, 25%, 37%, 50%, 75% and 100%.
The adjustment can only be done via the DPF1C configurator.

Adjusting the light timeout
Possible settings are 0-15 seconds and Off.
The adjustment can only be done via the DPF1C configurator.

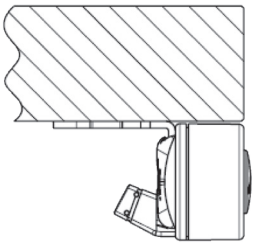
Error codes
Below please find the possible error codes, which can be displayed. The error codes will only be displayed when a button is pressed. The display will blink while showing the error code. The E16 error will overrule any other errors as the detection is registered only in the display and no message is send to the control box.

Error code	Description
E01	The desk has a unknown position and needs to be initialised.
E02	Overload in upwards direction has occurred.
E03	Overload in downwards direction has occurred.
E16	Illegal keys are pressed

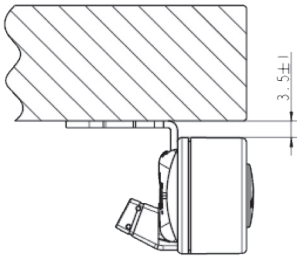
Mounting of all DPF versions

The DPF must be mounted via a mounting bracket. The mounting bracket comes in 4 different versions depending on how the panel should be mounted. Below are some examples on ways to mount:

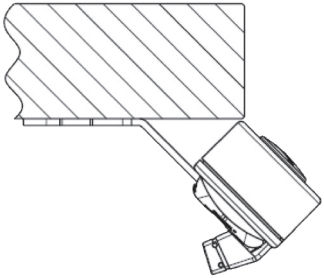
Example 1: (Article number 914759)
The panel is mounted with a 90° bracket and placed close to the tabletop



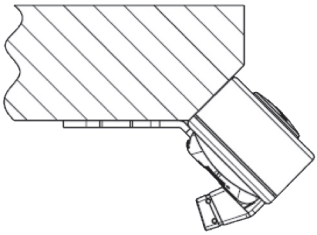
Example 2: (Article number: 914757)
The panel is mounted with a 90° bracket and place with a distance to the tabletop



Example 3: (Article number 914760)
The panel is mounted with a 45° bracket and placed at the edge of the tabletop



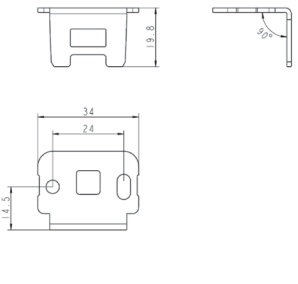
Example 4: (Article number 914785)
The panel is mounted with a 45° bracket and placed on a tabletop with angled front



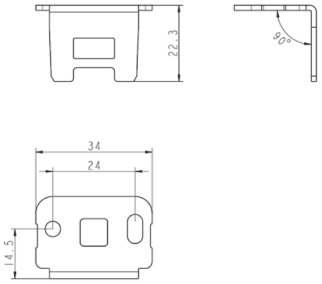
To mount the panel:
Just click the panel into the bracket and it is fixed.

Drawings of the mounting brackets:

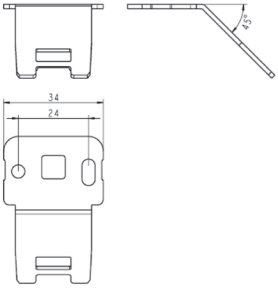
Article number 914759



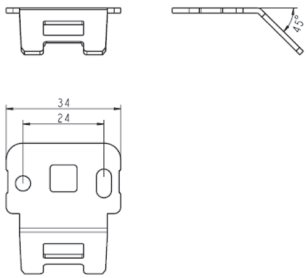
Article number 914757



Article number 914760



Article number 914785



Operation of the DPT

For safety reasons the DPT has a locking function.

If the DPT is locked, only a bar is lightning in the display. To unlock the control press ¨S¨ for 1 sec. When the DPT is unlocked, the height will be shown in the display. Now the DPT is active for 2.5 seconds. When pressing one of the keys you can do your adjustment. Hereafter the DPT will be active for 5 seconds but when there are no activations made within the mentioned time slot, the DPT will go in to locking mode again. Also, if you press ¨S¨ for unlocking too long, the DPT will unlock but immediately lock again.

The Touch Desk Panel is used to operate the DESKLINE® systems. The DPT is divided into parallel and memory drive. The two arrow buttons are used for parallel drive and the last four buttons for memory drive.

- ⇧ Desk up
- ⇩ Desk down
- S Store memory
- 1 Memory 1
- 2 Memory 2
- 3 Memory 3

Normal operation:
To run the desk up or down, press the ∧ or ∨ button, and keep it pressed until the desk reaches the desired height. The display will count the height as the table is moving and will continually show the height of the desk after stopping.

Storing a memory position:
Touch the "S" button and the display will flash "S" for 3 sec. While the ¨S¨ is displayed, touch the memory button 1, 2 or 3. The display will acknowledge by showing S1, S2 or S3 for 1 sec.
To abort a store sequence press the ∧ or ∨ button while the "S" is flashing, or wait the 3 seconds until the display automatically returns to show the height of the desk.

Drive to a stored position:
Press memory button 1, 2 or 3 and the system will start driving to the desired memory position. Keep the button activated until the position is reached. The display will count the height as it is driving to the memory position.

Customising the DPT digital display
Adjust the display to show the correct height:
The DPT will show 68 cm or 24.5 inches as the height of the desk as the default setting. It may be necessary to adjust the displayed height due to different thicknesses of desktops etc. when the DPT is delivered from the factory. To adjust the display touch the ¨S¨ button and the ∧ or ∨ button at the same time until the display shows the actual height of the desk.

Switch between cm and inch.
Switching between cm and inch can only be done via the DPF1C configurator.

Error Codes
The DPT has capability of displaying error codes for diagnostic feedback. Below are possible feedback errors, which can be displayed by the DPT. The error codes will only be displayed when a button is touched in unlocked mode. The display will blink while showing the error. E16 overrules any other error since the detection is registered only in the display and no message is sent to the control box. For detailed error description and codes, please see the appropriate CBD software description.

Error no.	Description
E01	The desk has an unknown position and needs to be initialised.
E02	Overload in upwards direction has occurred.
E03	Overload in downwards direction has occurred.
E16	Illegal keys are pressed.

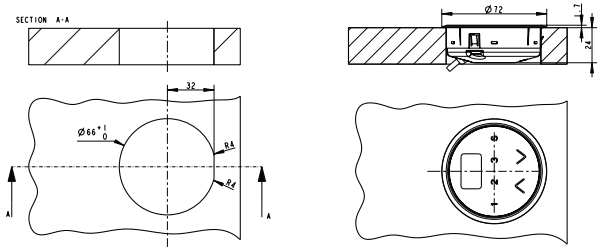
Mounting of the DPT:

The hole in the tabletop has to be made according to the drawing. The DPT is mounted in the hole and the two screws on the backside are fastened with a maximum torque of 40 Ncm. If you do not have a torque screw driver, please tighten gently and not more until you can feel a slight resistance. Do not use electrical tool!

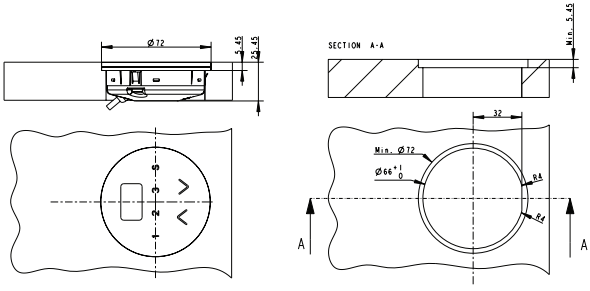
Please note:

1. Mounting the DPT into the tabletop should be done at the end-user, so the product will not be exposed to any stress, which can destroy the product when transported.
2. For countersink versions the technician must ensure that the acrylic plate is not put under pressure, which will push the acrylic plate out of place.
3. The screws which are delivered with the product must be used. If they have gone lost there should not be chosen new screws which are longer than 12 mm, otherwise top and bottom will disconnect.
4. If the product has visible damages it should not be mounted.
5. The product is IP30; the customers can be sure that fluids / dust will not enter the product. The front itself is closed by the acrylic plate's adhesive foil.
6. Cable release is specified for max. 5 kg
7. Remember to remove the protection foil.

Frame:



Countersink:



Operation of the WDPL

The batteries:

Wired WDPL: Install 3 x 1.5 V batteries type AA.
The batteries are used as a backup of the clock function if the CBD is disconnected from the mains.

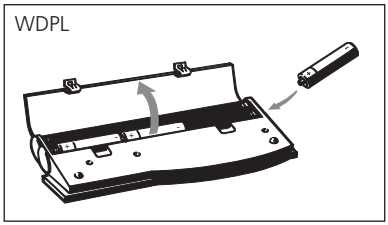


Figure 9

When the batteries are mounted, the display will show the clock function in hh: mm. The clock has to be adjusted. **See adjusting the clock on page 22.**

Low battery:

Change batteries at weak contrast in the display or when the display shows strange symbols/misinformation. **This does not influence the function of the WDPL - it is exclusively a sign that the batteries are to be replaced.**

The WDPL will also work without batteries because it will be powered by the control box.
The WDPL will also work on a CBD4/CBD5 with mains cut-off. The clock will only be shown if you have battery backup.

The cable from the WDPL is connected to the control box under your table:

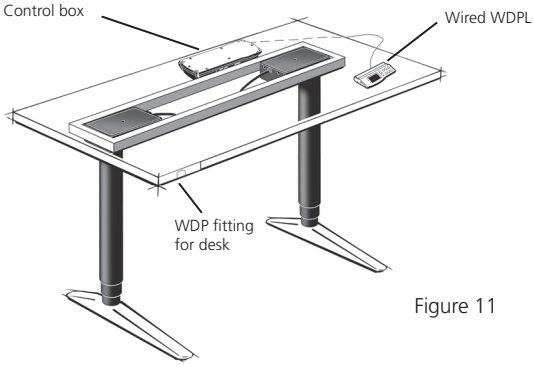
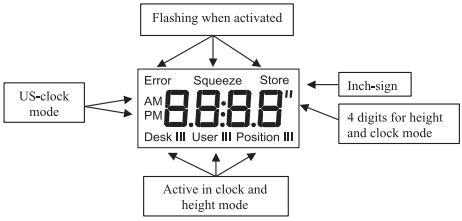


Figure 11

Display layout - WDPL:



Calibrating the WDPL

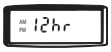
For the WDPL to function correctly you have to calibrate your system. This has to be done before using the WDPL. You only have to do this once.

Action:	Display view:
1. Switch between [cm] and [inch]. Press and hold Store and then press User	
2. Measure the height from desk to floor. If only one desk is connected, - go to point 4.	
3. Press Desk and then press I, II or III to select desk. If only one desk is connected it is not possible to select Desk II or III.	
4. Press and hold Store and then press ∧ or ∨ to adjust the height in the display. Example: The display will switch from e.g. 68 to 69, 70, 71 etc. when Store is pressed and held and then ∧ is pressed. and e.g. 68 to 67, 66 etc. when Store is pressed and held and then ∨ is pressed.	
5. When the wanted height is shown in the display, press and hold Store and then Desk. The reference height of the desk will now be stored in the control box. When the reference height is stored, the digits will be switched off for 1 sec. and back on again.	

If the buttons are not activated for 15 sec., the clock function will appear in the display. It is not necessary to repeat the calibration when changing batteries.

Adjusting the clock

Example:

Action:	Display view:
1. Press the "clock button" using a ball pen. 24hr mode (European time mode) is default - can be changed to 12hr mode (US time mode) Changing time mode: Press ∧ or ∨ (Press the "clock button" again to confirm "time mode" using a ball pen)	 Flashing  Flashing
2. Press ∧ or ∨ to adjust "hh"	 hh is flashing
3. Press the "clock button" again to confirm "hh".	 Switches to PM if hh > 11
4. Press ∧ or ∨ to adjust "mm"	 mm is flashing
5. Press the clock button again to confirm "mm"	

The clock is now activated.

Troubleshooting (WDPL):

If errors occur the error code appears in the display - The "error" segment flashes (1 Hz).

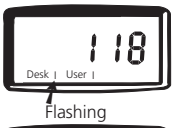
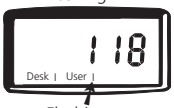
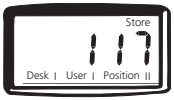
Error code	Description of the error	Troubleshooting
E-01	Position lost	Initialise
E-02	Overload in upward direction	Remove heavy objects from the desk
E-03	Overload in downward direction	Remove objects that prevent downwards operation
E-16	Illegal push on key	Release all buttons and activate valid button / button combination

Store a memory position

3 users can store 3 memory posistions each. The connected desks (max. 3) are to be adjusted individually - one at a time.

Quick setup:
On the back of the WDP you will find a quick guide for storing a memory position.

Example:

Action:	**Display view:**
If only one desk is connected, - go to point 4.	
1. Press Desk	
2. Press I , II or III until the wanted desk is shown in the display.	 Flashing
3. Press User	
4. Press I , II or III until the wanted user is shown in the display	 Flashing
5. Press ∧ or ∨ until the wanted height is obtained.	
6. Press Store and then I , II or III	

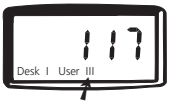
The position is now stored in the control box.
To store a new memory position on the same desk, go through points 3 to 6 again.

If the buttons are not activated for 15 sec., the clock function will appear in the display.

Switch to a stored memory position

Quick setup:
On the back of the WDP you will find a quick guide for storing a memory position.

Example:

Action:	**Display view:**
1. Press User	 Flashing
2. Press I, II or III until the wanted user is shown in the display	
3. Press and hold I, II or III until all desks have reached their memory position.	
The display will show the height of the moving desk for about 15. sec.	Position I is flashing - digits counting from 117 to 88. When the desk has reached the new height position I it will stop flashing.

If the buttons are not activated for 15 sec., the clock function will appear in the display.

Disposal of LINAK's products

As LINAK's customers often ask us how our products can be disposed of or scrapped we have prepared this guidance that enables a classification to different waste fractions for recycling or combustion.

Guidance

We recommend that our products be disassembled as much as possible and divided into different waste groups for recycling or combustion.
For example, waste can be sorted into metals, plastics, cable scrap, combustible material and recoverable resources.
Some of these main groups can be further divided into subgroups; e.g. metal can be divided into steel/aluminium/copper and plastic can be divided into ABS/PA/PE/PP.
As an example, the table below breaks down the different components in LINAK products to various recycling groups:

Product	Components	Recycling group
Handset/Control:	Plastic housing Cable PCB board	Plastic recycling or combustion Cable scrap or combustion Electronics scrap

By now, almost all our casted plastic parts are supplied with an interior code for plastic type and fibre contents, if any.

Main groups of disposal

Product main groups	Metal Scrap	Cable scrap	Electronics scrap	Plastic recycling or combustion	Comments
DPXX		X	X	X	
WDPL		X	X	X	

Disposal of batteries

"Details regarding safe disposal of used and leaking batteries:
Batteries should be disposed in accordance with appropriate federal, state and local regulations. LINAK recommends that used or leaking batteries are disposed through local recycling system. Please do not throw used or leaking batteries in normal household waste or in nature. This will cause damage to the enviroment.

How to deal with leaking batteries

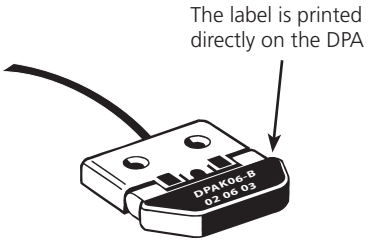
Leaking batteries should be disposed as described above.
If leaking batteries are discovered in the product, the batteries must be removed at once to minimise damage to the product. If leaking batteries are left in the product, it become defective.

It is recommended to use plastic gloves when handling leaking batteries. The contents of a leaking batteries can cause chemical burns and respiratory irritation.

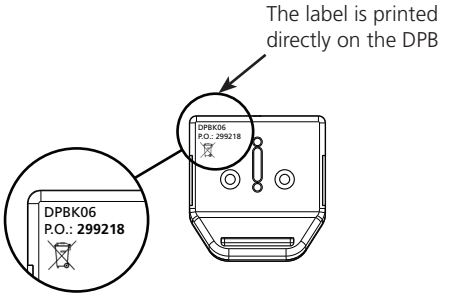
If exposed to the contents of a leaking battery, please wash with soap and water. If irritation persists, please seek medical attention. In case of eye contact, please flush eyes thoroughly with water for 15 minutes and seek medical attention."

Labels

Label DPA



Label for DPB



Label for DP

Label for DPH

Label for DP1CS

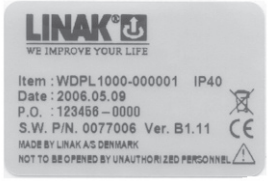
Label for DPT

Label for DPF

Label for DPF1C

Label for DPF1D

Label for WDPL



Label for DPF1K

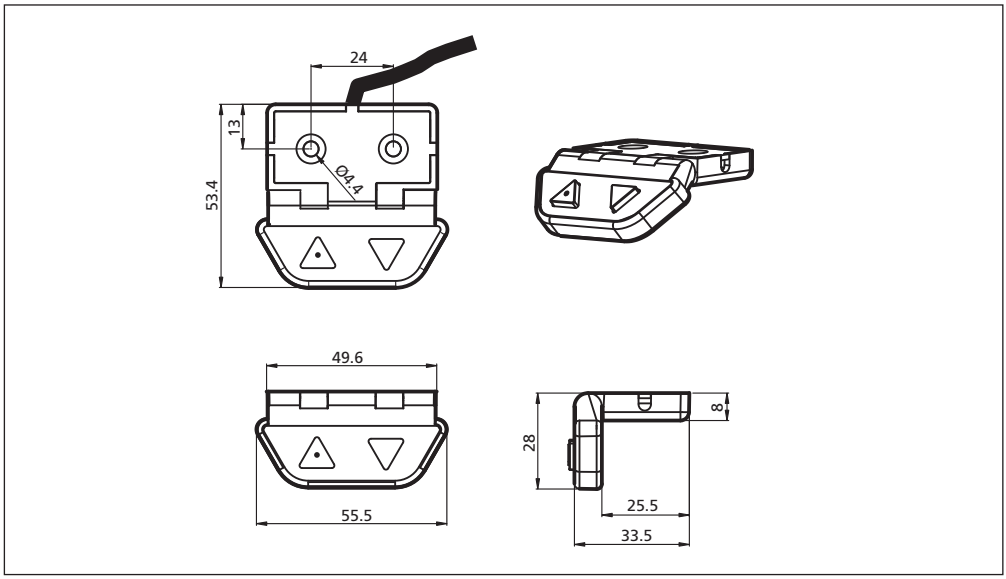
Label for DPF2K

Label for DPF3K

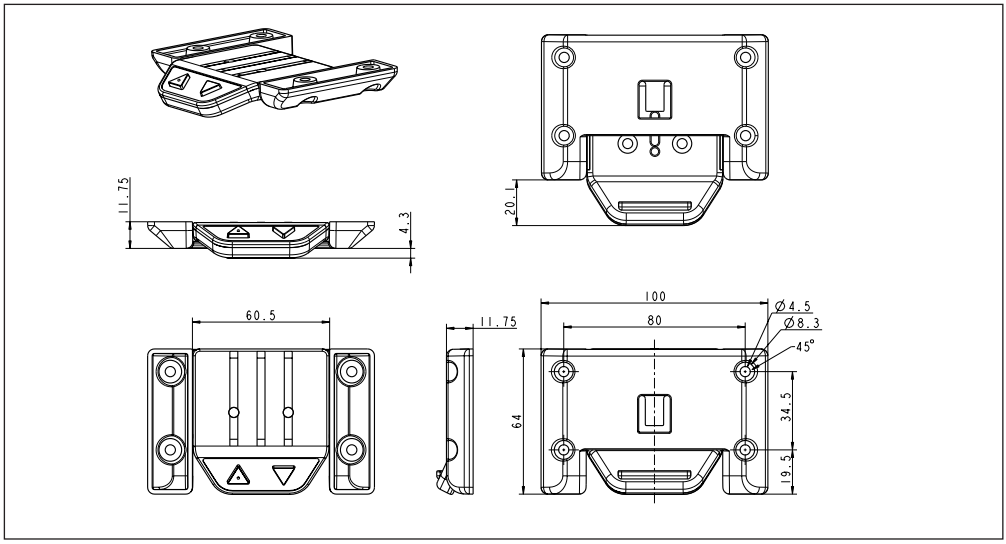
DRAWING APPENDIX

DESKLINE®

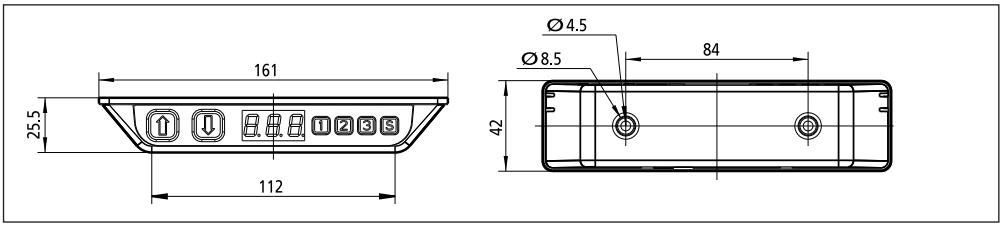
DPA



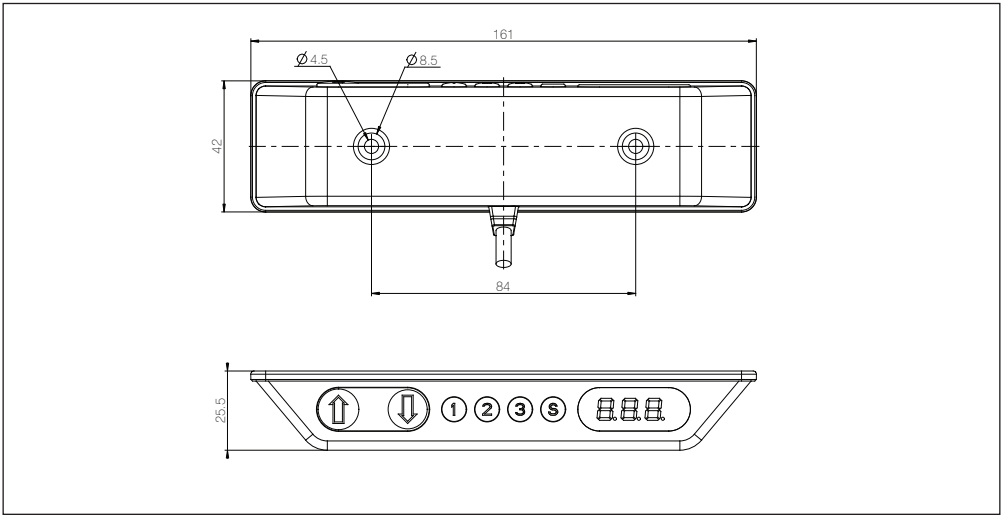
DPB with drawer



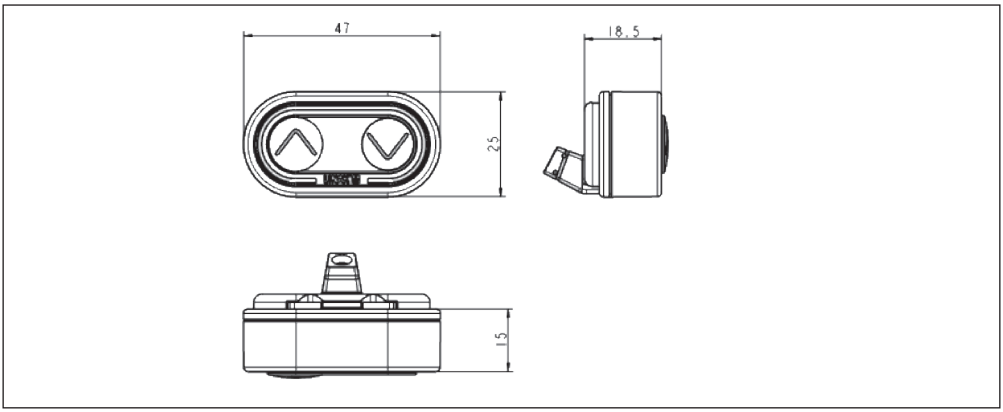
DP1C Desk Panel



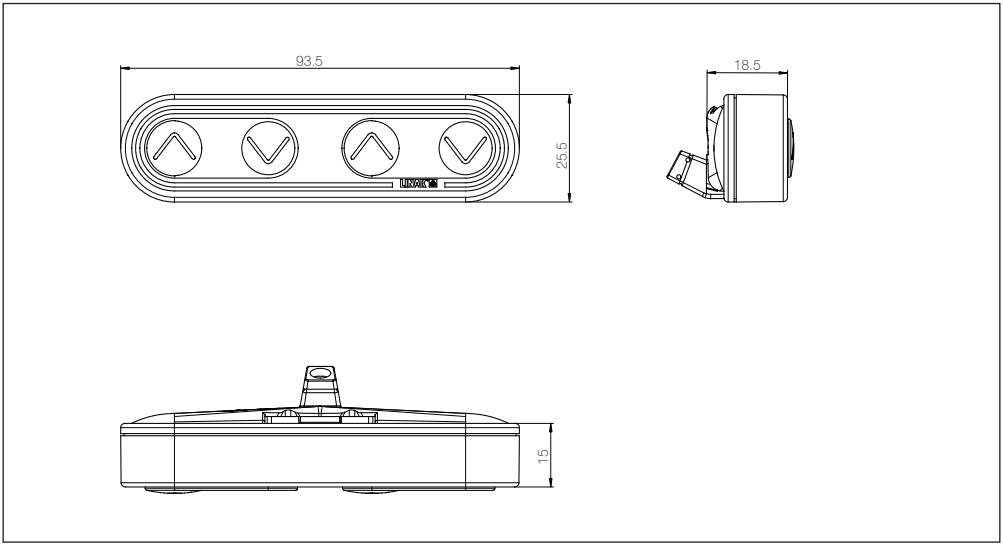
DP1CS Desk Panel



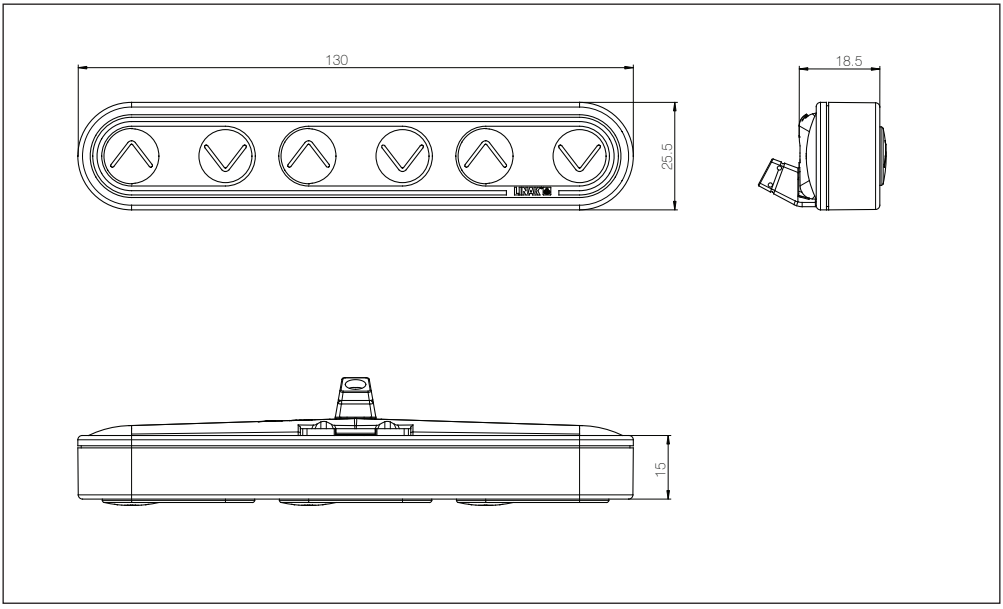
DPF1K Desk Panel



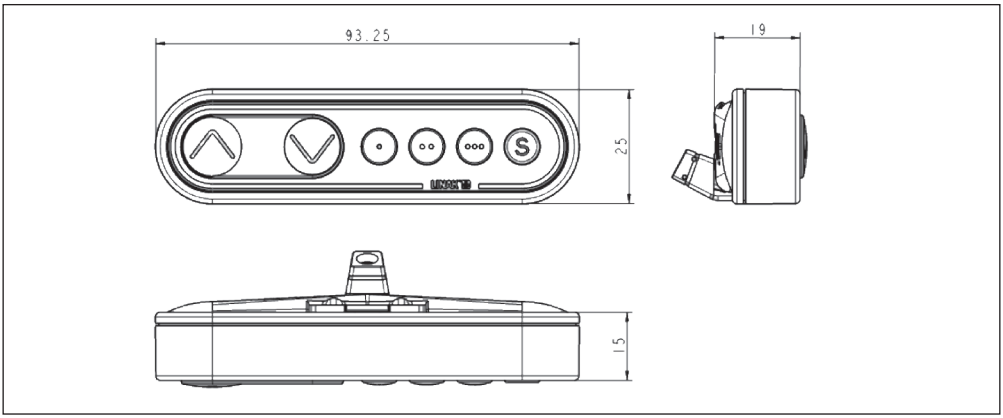
DPF2K Desk Panel



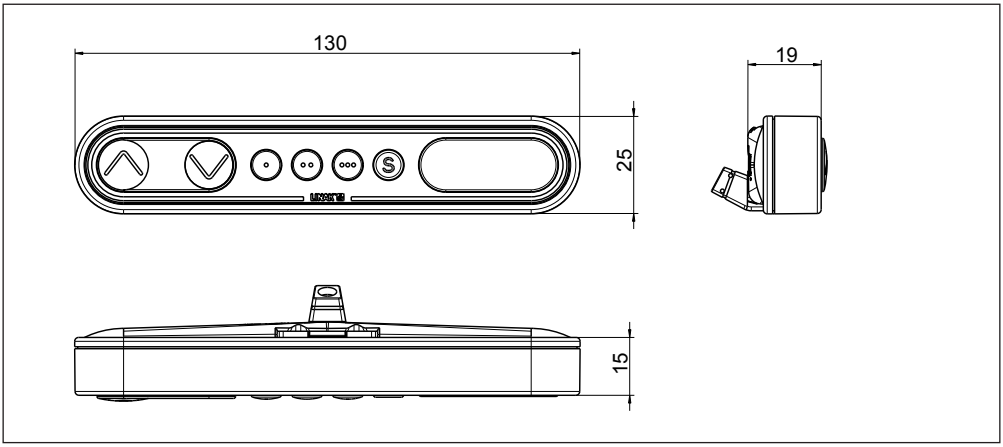
DPF3K Desk Panel



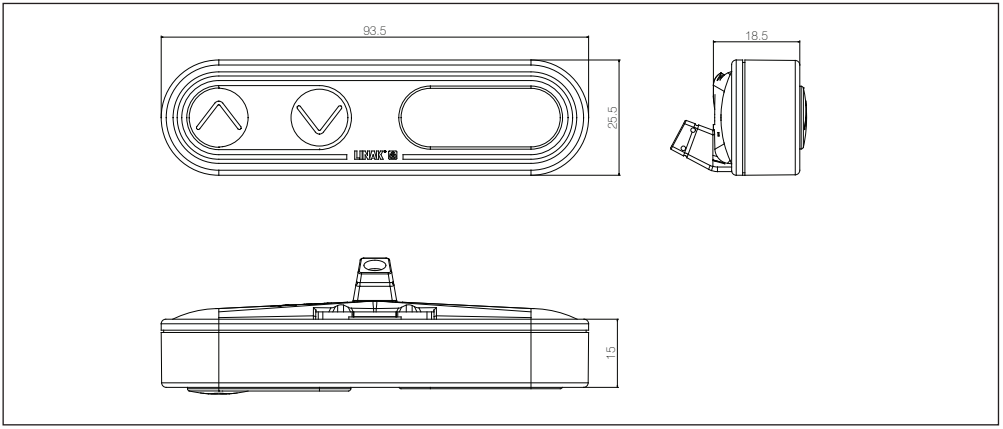
DPF1M Desk Panel



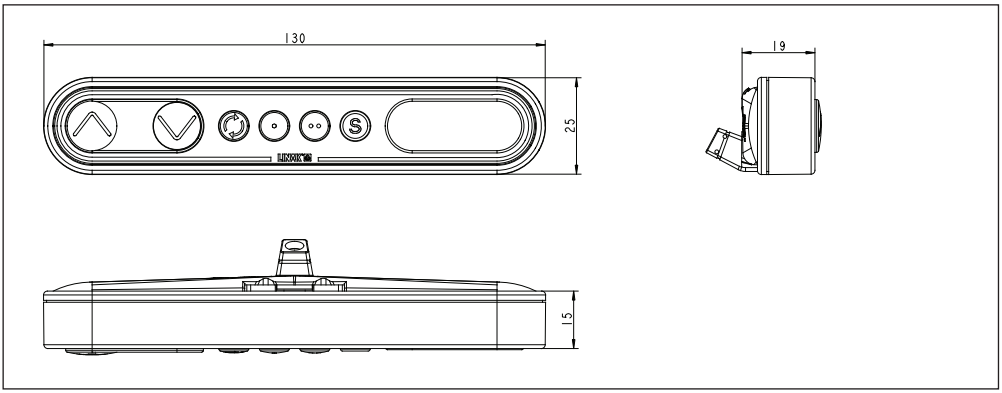
DPF1C Desk Panel with display



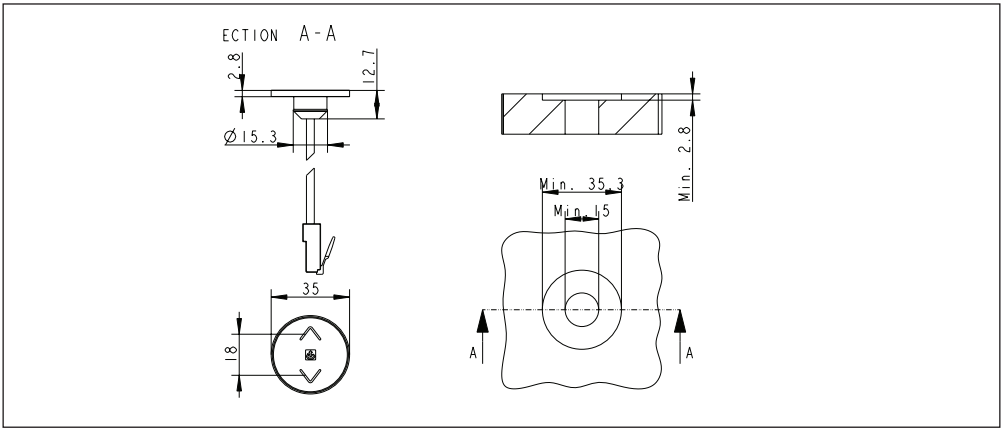
DPF1D Desk Panel



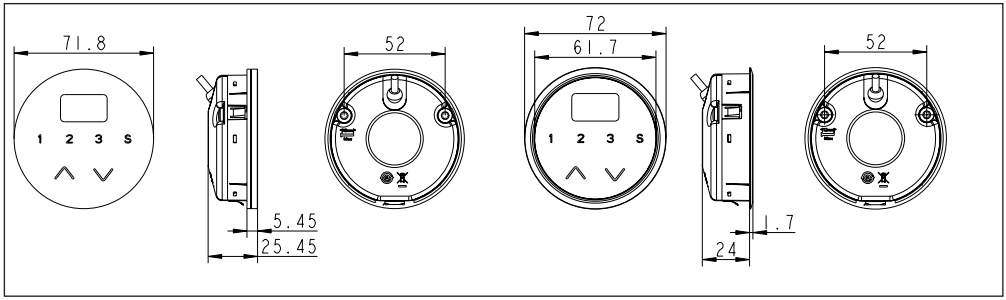
DPF4T Desk Panel



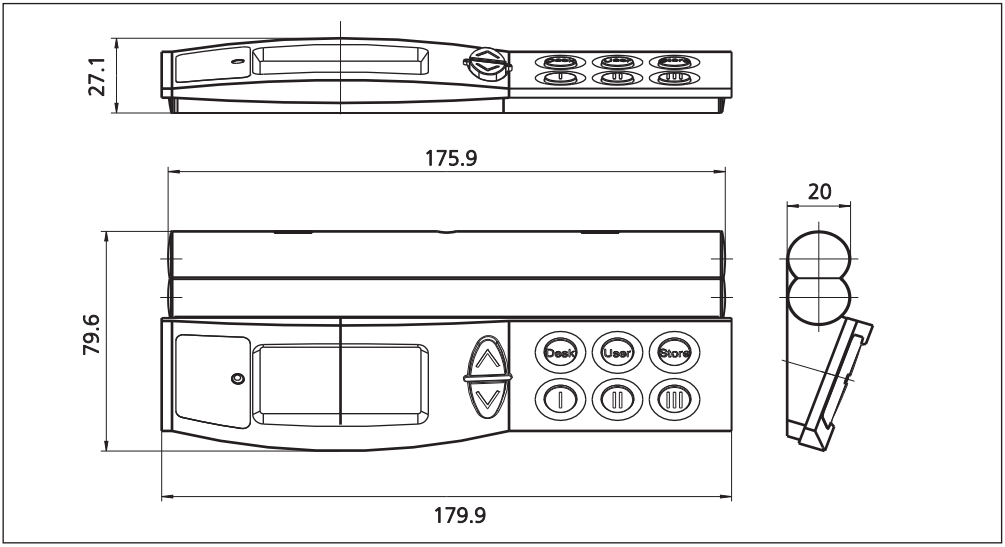
DPH Desk Panel



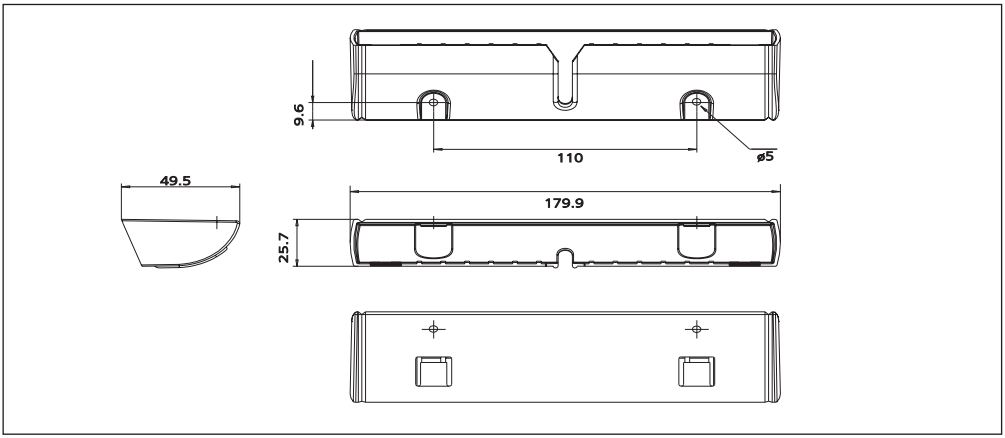
DPT Desk Panel



WDP



WDP fitting for desk



DECLARATION OF CONFORMITY

LINAK A/S
Smedevænget 8
DK - 6430 Nordborg

hereby declares that LINAK Actuator System composed of:

Control Box(s)	CBD4, CBD5, CBD6	
And		
Linear Actuator(s)	31xxxH-xxxxx50S, DB4, DB5, DB6, DB7, DB9, DB14, DB16	and / or
Lifting Column(s)	DL1A, DL2, DL4, DL5, DL6, DL7, DL8, DL9, DL10, DL11, DL14, DL15, DL16	
And		
Desk Panel(s)	DP1C, DP1K, DPT, DPB, DPF, DPBK, DP1L, DP1V, DPA, DPH, WDPL1	and / or
Handset(s)	HB2xxF2+00003	

complies with the EMC Directive: 2004/108/EC according to following standards:
EN 61000-6-1:2001, EN 61000-6-3:2001, EN 55022:1998+A2 Class B,

and complies with Low Voltage Directive 2006/95/EC according to the standard:
EN 60335-1:2002+A1:2004+A11:2004+A12:2006+A2:2006+A13:2008

and complies with Machinery Directive 2006/42/EC according to the standard:
EN 13849-1:2008 SRP/CS Cat. B, PL = b and SRESW PL = b

And		
Controls:	RF-transmitter: HB1XRFXXXX	and/or
	RF-transmitter: HB2XRFXXXX	and/or
	RF-receiver: RFRL	

complies with the Radio equipment and Telecommunications terminal equipment Directive 1999/5/EC:
EN 300220-2:2006, EN 61000-6-1:2007, EN 61000-6-3:2007,
EN 60335-1:2002+A1:2004+A11:2004+A12:2006+A2:2006+A13:2008, EN 62311:2008

Nordborg, 2011-05-25

LINAK A/S
John Kling, B.Sc.E.E.
Certification and Regulatory Affairs
Authorized to compile the relevant technical documentation

LINAK APPLICATION POLICY

The purpose of the application policy is to define areas of responsibilities in relation to applying a LINAK product defined as hardware, software, technical advice, etc. related to an existing or new customer application.

LINAK products as defined above are applicable for a wide range of applications within the Medical, Furniture, Desk and Industry areas. Yet, LINAK cannot know all the conditions under which LINAK products will be installed, used, and operated, as each individual application is unique.

The suitability and functionality of the LINAK product and its performance under varying conditions (application, vibration, load, humidity, temperature, frequency, etc.) can only be verified by testing, and shall ultimately be the responsibility of the LINAK customer using any LINAK product.

LINAK shall be responsible solely that the LINAK products comply with the specifications set out by LINAK and it shall be the responsibility of the LINAK customer to ensure that the specific LINAK product can be used for the application in question.

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